IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

E. Neil Lewis et al.

Examiner:

Curtis

Serial No.:

09/828,281

Art Unit

2872

Filed:

April 6, 2001

Title:

HYBRID-IMAGING SPECTROMETER

CERTIFICATE OF HAND DELIVERY

The undersigned hereby certifies that this document is being hand delivered to the United States Patent and Trademark Office on August 19, 2003

Kristofer E. Elbing, Registration No. 34,590

Assistant Commissioner for Patents Washington, D.C. 20231

AUG 21 2003

STATEMENT FILED PURSUANT TO THE DUTY OF DISCLOSURE UNDER 37 C.F.R. §§ 1.56, 1.97 and 1.98

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants request 08/27/2003 AJOHNSOI 00000007 09828281 Of FC:1806 consideration of this Information Disclosure Statement.

PART I: Compilance With 37 C.F.R. § 1.97

This Information Disclosure Statement has been filed more than three months after the filing date of this application and after the mailing date of the first Office Action, but before the mailing date of either a final office action under 37 C.F.R. §1.113 or a Notice of Allowance under 37 C.F.R. §1.311. The fee of \$180.00 as set forth in §1.17(p) is enclosed.

PART II: <u>Information Cited</u>

Applicants hereby make of record in the above-identified application the information listed on the attached form PTO-1449 (modified). The order of presentation of the references should not be construed as an indication of the importance of the references.

PART III: Remarks

A copy of all documents listed on the attached PTO-1449 form (modified) is enclosed. It is respectfully requested that:

The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims; and

The citations for the information be printed on any patent which issues form this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that a more relevant information does not exist.

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his/her own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

The Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment, to Deposit Account No. 50-0750.

Respectfully submitted,

Ingust 18, 2003

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SUBSTITUTE FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (MODIFIED) PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(Use several sheets if necessary)

Application No.

09/828,281

Filing Date

April 6, 2001

First Named Inventor

Lewis, E. Neil

Art Unit

2872

Curtis, Craig H.

Examiner Name Attorney Docket No.

S0001-014002

(37 CFR 1.98(b))

U.S. PATENTS

Examiner's Initials	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date (If Appropriate)
	6,495,818	17 Dec 2002	Mao	250	226	
	6,380,539	30 Apr 2002	Edgar	250	339.05	
	6,373,568	4 Apr 2002	Miller et al.	356	326	
	6,323,944	27 Nov 2001	Xiao	356	73	
	6,313,423	6 Nov. 2001	Sommer et al.	209	587	
	6,253,162	26 Jun 2001	Jarman et al.	702	179	
	6,236,047	22 May 2001	Malin et al.	250	339	
	6,229,913	8 May 2001	Nayar et al.	382	154	
	6,211,906	3 Apr 2001	Sun	348	144	
	6,172,743	9 Jan 2001	Kley et al.	356	39	
	6,166,373	26 Dec 2000	Mao	250	226	
	6,118,530	12 Sep 2000	Bouevitch et al.	356	308	
	6,078,390	20 Jun 2000	Bengtsson	356	318	
	5,949,480	7 Sep 1999	Gerhart et al.	348	135	
	5,880,830	9 Mar 1999	Schechter	356	318	
	5,828,066	27 Oct 1998	Messerschmidt	250	339	
	5,790,188	4 Aug 1998	Sun	348	144	
	5,675,155	7 Oct 1997	Pentoney, Jr. et al.	250	458.1	
	5,668,373	16 Sep 1997	Robbat, Jr. et al.	250	339.12	
	5,615,009	25 Mar 1997	Sakura et al.	356	326	
	5,606,413	25 Feb 1997	Bellus et al.	356	326	
	5,589,351	31 Dec 1996	Harootunian	435	29	_
	5,579,105	Nov. 26, 1996	Belton et al.	356	310	
	5,568,266	22 Oct 1996	Ciza et al.	356	402	
	5,558,231	24 Sep 1996	Weier	209	580	
	5,545,897	13 Aug 1996	Jack	250	339.13	
	5,532,128	2 Jul 1996	Eggers et al.	435	16	
	5,528,368	18 Jun 1996	Lewis et al.	356	346	

5,504,332 2 Apr 1996 Richmond et al. 250 339.12 5,488,474 30 Jan 1996 Fateley et al. 356 326 5,448,069 5 Sep 1995 Tobler et al. 250 339.01 5,440,388 8 Aug 1995 Erickson 356 346 5,386,112 31 Jan 1995 Dixon 250 234 5,379,065 3 Jan 1995 Cutts 348 269 5,272,518 21 Dec 1993 Vincent 356 405 5,257,086 26 Oct 1993 Fateley et al. 356 328 5,244,630 14 Sep 1993 Khalil et al. 422 52 5,166,755 24 Nov 1992 Gat 356 419 5,112,125 12 May, 1992 Neumann 356 73								
5,448,069 5 Sep 1995 Tobler et al. 250 339.01 5,440,388 8 Aug 1995 Erickson 356 346 5,386,112 31 Jan 1995 Dixon 250 234 5,379,065 3 Jan 1995 Cutts 348 269 5,272,518 21 Dec 1993 Vincent 356 405 5,257,086 26 Oct 1993 Fateley et al. 356 328 5,244,630 14 Sep 1993 Khalil et al. 422 52 5,166,755 24 Nov 1992 Gat 356 419 5,112,125 12 May, 1992 Neumann 356 73								
5,440,388 8 Aug 1995 Erickson 356 346 5,386,112 31 Jan 1995 Dixon 250 234 5,379,065 3 Jan 1995 Cutts 348 269 5,272,518 21 Dec 1993 Vincent 356 405 5,257,086 26 Oct 1993 Fateley et al. 356 328 5,244,630 14 Sep 1993 Khalil et al. 422 52 5,166,755 24 Nov 1992 Gat 356 419 5,112,125 12 May, 1992 Neumann 356 73								
5,386,112 31 Jan 1995 Dixon 250 234 5,379,065 3 Jan 1995 Cutts 348 269 5,272,518 21 Dec 1993 Vincent 356 405 5,257,086 26 Oct 1993 Fateley et al. 356 328 5,244,630 14 Sep 1993 Khalil et al. 422 52 5,166,755 24 Nov 1992 Gat 356 419 5,112,125 12 May, 1992 Neumann 356 73								
5,379,065 3 Jan 1995 Cutts 348 269 5,272,518 21 Dec 1993 Vincent 356 405 5,257,086 26 Oct 1993 Fateley et al. 356 328 5,244,630 14 Sep 1993 Khalil et al. 422 52 5,166,755 24 Nov 1992 Gat 356 419 5,112,125 12 May, 1992 Neumann 356 73								
5,272,518 21 Dec 1993 Vincent 356 405 5,257,086 26 Oct 1993 Fateley et al. 356 328 5,244,630 14 Sep 1993 Khalil et al. 422 52 5,166,755 24 Nov 1992 Gat 356 419 5,112,125 12 May, 1992 Neumann 356 73								
5,257,086 26 Oct 1993 Fateley et al. 356 328 5,244,630 14 Sep 1993 Khalil et al. 422 52 5,166,755 24 Nov 1992 Gat 356 419 5,112,125 12 May, 1992 Neumann 356 73								
5,244,630 14 Sep 1993 Khalil et al. 422 52 5,166,755 24 Nov 1992 Gat 356 419 5,112,125 12 May, 1992 Neumann 356 73								
5,166,755 24 Nov 1992 Gat 356 419 5,112,125 12 May, 1992 Neumann 356 73								
5,112,125 12 May, 1992 Neumann 356 73								
5 000 045 0 0 1 1 1 001 0 7								
5,029,245 2 Jul 1991 Keranen et al. 250 205								
5,007,737 16 Apr 1991 Hirleman, Jr. 356 336								
4,922,092 1 May 1990 Rushbrooke et al. 250 213								
4,788,428 29 Nov 1988 Metcalf et al. 250 332								
4,278,538 14 Jul 1981 Lawrence et al. 209 580								
4,054,389 18 Oct 1977 Owen 356 189								
4,004,150 18 Jan 1979 Natelson 250 328								
3,929,398 30 Dec 1975 Bates 356 186								
3,737,239 5 Jun 1973 Adams et al. 356 177								
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION								
	slation s/No)							
WO 00 60529 A1 12 Oct 2000 WIPO								
WO 99 02950 A1 21 Jan 1999 WIPO								
WO 98 15813 A1								
WO 97 13839 A1								
WO 89 05465A1								
GB 2 014 300 A 22 Aug 1979 United Kingdom								
EP 0 887 638 A1 30 Dec 1998 European Patent Office								
DE 28 23 514 A 5 May 1978 Germany Yes								
OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)								
Akong M. et al. "High Throughput Magaurement of Introcellular Co ²⁺ by Elyproceance Imaging of a OS M	Akong, M. et al. "High-Throughput Measurement of Intracellular Ca ²⁺ by Fluorescence Imaging of a 96-Well Microtiter Plate," <u>25th Annual Meeting of the Society for Neuroscience, Society for Neuroscience Abstracts</u> , 21 (1-3). 1995, 577. Frgala, T; Proffitt, RT; Reynolds, CP. "A novel 96-well plate cytotoxicity assay based on fluorescence digital imaging microscopy," <u>Proceedings of the Eighty-sixth Annual Meeting of the American Association for Cancer Research</u> , 36 (March 1995).							
Microtiter Plate," <u>25th Annual Meeting of the Society for Neuroscience</u> , <u>Society for Neuroscience Abstraction</u> (1-3). 1995, 577. Frgala, T; Proffitt, RT; Reynolds, CP. "A novel 96-well plate cytotoxicity assay based on fluorescence diginaging microscopy," <u>Proceedings of the Eighty-sixth Annual Meeting of the American Association for Care</u>	ancer							

	Grant, RL; Acosta, D. "Ratiometric measurement fluorescence multi-well plate reader," In Vitro Ce	nt of intracellular pH of cultured cells with BCECF in a ll Dev Biol Anim, 33(4) (April 1997), 256-260.				
	Hyvarinen, Tymo; Herrala, Esko; and Dall' Ava, Alberto. "Direct sight imaging spectrograph: a unique ad component brings spectral imaging to industrial applications," Presented at 1998 IS&T/SPIE's Symposium Electronic Imaging: Science and Technology (El98), in Conference 3302: Digital Solid State Cameras: Dand Applications, Paper 3302-21, January 25-30, 1998, San Jose Convention Center, San Jose, Californ					
	Jansen, EH; Buskens, CA; van den Berg, RH. "Fast Detection of Homogeneous Chemiluminescent Immunoassays with a Sensitive Photoplate," <u>Journal of Chromatography</u> , 489 (1989) 245-253. Mao, Chengye; Seal, Mike; Heitschmidt, Gerald. "Airborne Hyperspectral Image Acquisition with Digital CCD Video Camera," 16th Biennial Workshop on Videography & Color Photography in Resource Assessment (1997 129-140.					
	Modell et al.; U.S. Patent Application Publication US 2001/0041843 A1; publication date Nov. 15, 2001.					
	Optical Insights, LLC. "MultiSpec Imager," 1998.					
	Schullek, John R; Butler, John H; Ni, Zhi-Jie; Chen, Dawn; Yuan, Zhengyu. "A High-Density Screening Format for Encoded Combinatorial Libraries: Assay Miniaturization and Its Application to Enzymatic Reactions," Analytical Biochemistry, 246 (1997), 20-29.					
	Spectral Imaging Ltd. "Specim ImSpector Reference Examples," 1999.					
	Sun, Xiuhong; Baker, James; Hordon, Richard. "A Spectrally-Filtered Airborne Video System and Its Imagery," 15th Biennial Workshop on Videography & Color Photography in Resource Assessment (1995), 253-257.					
EXAMINER		DATE CONSIDERED				